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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,901	10/10/2001	Robert V. Belenger	77700	6877

7590

02/04/2003

Office Of Counsel
Naval Undersea Warfare Center Division
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EXAMINER

VORTMAN, ANATOLY

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,901

Applicant(s)

BELENGER ET AL.

Examiner

Anatoly Vortman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “disc-shaped” reactive strip recited in claim 7 and “dome-shaped” shapes recited in claims 8 and 9, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7-10, are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 7 recites “said push button pushes against said multi-metallic heat reactive strip to reset it to said second shape”. The aforementioned recitation contradicts with parent

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claim 4, which recites that “said manually resetting means snaps said multi-metallic heat reactive strip back to said first shape”.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, are rejected under 35 U.S.C. 102(b) as being anticipated by US/4, 635,021 to Hsieh.

Regarding claims 1 and 2, Cheng disclosed (Fig. 2) a device for interrupting a load circuit and indicating a current overload condition comprising: first (12) and a second (12') electrodes being coupled to a load circuit, said load circuit having a source of electrical power (inherently) to connect current to a load; a light emitter circuit (3, 4) having an indicator lamp (3) serially connected to a current limiting resistor (4), said light emitter circuit being connected to said first electrode (12); and a multi-metallic heat reactive strip (13) connected to said first and second electrodes (12, 12') having a first shape to close said load circuit, and said heat reactive strip being heated by overload current, said overload current creating the only forces to snap into a second shape to open said load circuit and close said light emitter circuit (via contact (2)); column

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2, lines 48-58), said indicator lamp (3) of said light emitter circuit radiating light to visually indicate said current exceeding a predetermined overload magnitude and said open load circuit.

Regarding claims 3 and 4, Hsieh disclosed means (14) for manually resetting said heat reactive strip (13) back from said second shape to said first shape.

Regarding claim 5, Hsieh disclosed a housing (1) having said first and second electrodes (12, 12') extending from its bottom and said manually resetting means (14) and said indicator lamp (3) extending from its top surface, (Fig. 2).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 7, as best understood, and claim 6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh ('021) in view of US/5,995,380 to Maue et al., (Maue).

Regarding claims 6 and 7, Hsieh disclosed all of the claims limitations as apply to claim 5, and further that a push button resetting means (14) is extending through the housing (1), wherein said push button (14) pushes against said heat reactive strip (13) to reset it to said first shape after cooling, and (as shown on Fig. 3) that electrodes (71, 71') of the load circuit are inserted into sockets (121, 121') of the device housing (1), but not the opposite, i.e., that electrodes of the device are inserted into the sockets of the load circuit, as claimed in claim 6.

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Maue disclosed (Fig. 2) an electrical junction box for automobiles, wherein protective devices (17) and electrical components (19) comprising electrodes, which are inserted into the sockets of a circuit.

Since inventions of Hsieh and of Maue are from the same field of endeavor (plugable electrical components), the purpose of the devices having electrodes that are inserted into the sockets of the circuit disclosed by Maue would be recognized for the invention of Hsieh.

It would have been obvious to a person of ordinary skill in the plugable electrical devices art at the time the invention was made to reverse said electrodes and sockets in the device of Hsieh (i.e. to provide electrodes for the device (1) and sockets for the load circuit (7)) in order to enhance electrical safety of the device of Hsieh (i.e. to eliminate the exposure of the energized electrodes (71)).

Alternatively, it would have been obvious to one having ordinary skill in the plugable electrical devices art at the time the invention was made to reverse said electrodes and sockets in the device of Hsieh (i.e. provide electrodes for the device (1) and sockets for the load circuit (7)), since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure:

US/6072381, 6275134, US/2001/0006365, 2002/0149464, 5491460, 5012495, 4672351, 5844465, 4325046, and 3913049 disclosed thermal switches with indicating means.

US/4281322 disclosed electrical fuse with indicating means.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 703-308-7824. The examiner can normally be reached on 9:30-6:00, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Anatoly Vortman
Primary Examiner
Art Unit 2835

A.V.
November 22, 2002

A handwritten signature in black ink, appearing to read 'A. Vortman', with a horizontal line extending to the right.